

From wang!elf.wang.com!ucsd.edu!info-hams-relay Sun Mar 31 19:00:05 1991 remote  
from tosspot  
Received: by tosspot (1.64/waf)  
via UUCP; Mon, 01 Apr 91 08:31:48 EST  
for lee  
Received: from somewhere by elf.wang.com  
id aa29061; Sun, 31 Mar 91 19:00:04 GMT  
Received: from ucsd.edu by relay1.UU.NET with SMTP  
(5.61/UUNET-shadow-mx) id AA01208; Sun, 31 Mar 91 13:05:28 -0500  
Received: by ucsd.edu; id AA08768  
sendmail 5.64/UCSD-2.1-sun  
Sun, 31 Mar 91 07:45:13 -0800 for brian  
Received: by ucsd.edu; id AA08749  
sendmail 5.64/UCSD-2.1-sun  
Sun, 31 Mar 91 07:45:08 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/  
lqueue -oi -finfo-hams-relay info-hams-list  
Message-Id: <9103311545.AA08749@ucsd.edu>  
Date: Sun, 31 Mar 91 07:45:06 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>  
Reply-To: Info-Hams@ucsd.edu  
Subject: Info-Hams Digest V91 #254  
To: Info-Hams@ucsd.edu

Info-Hams Digest                      Sun, 31 Mar 91                      Volume 91 : Issue 254

Today's Topics:

                    IC-W2A Announcement  
            PACKET SOLAR TERRESTRIAL FORECAST AND REVIEW (PART I)  
            PACKET SOLAR TERRESTRIAL FORECAST AND REVIEW (PART II)  
    SOLAR TERRESTRIAL FORECAST AND REVIEW - STORM EVENT SUMMARY  
                    Two Questions

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 29 Mar 91 23:59:58 GMT  
From: sdd.hp.com!zaphod.mps.ohio-state.edu!rpi!bu.edu!transfer!lectroid!jjmhome!  
zinn!ubbs-nh!wa1omm!paul@ucsd.edu

Subject: IC-W2A Announcement  
To: info-hams@ucsd.edu

FOR IMMEDIATE RELEASE

ICOM INTRODUCES THE IC-W2A DUAL BAND FM TRANSCEIVER

MARCH 21, 1991

Icom continues to lead the way in dual band handhelds with the introduction of the IC-W2A dual band handheld. Operating on 2-meters and 440MHz has never been so much fun! Exceptional product design and innovation gives you the advantage of choosing the new IC-W2A or the IC-24AT dual bander. Replacing the IC-32AT, the new IC-W2A has a tough act to follow but with all the additional features it will be the talk on all the air waves.

\*COMPACT AND LIGHTWEIGHT

The IC-W2A measures only 2.1(W) x 5.3(H) x 1.4(D) inches and weighs less than 16 ounces. For a perfect grip the new IC-W2A is just 6.7 inches around and features side panel ridges.

\*SIMULTANEOUS RECEIVE

The new IC-W2A has the capability to receive two band signals simultaneously. Receive on one band while transmitting on another. Conversation is unrestricted! Furthermore, wait for scheduled QSO's on one band while operating on the other.

\*DUAL BAND CONVENIENCE

Dual band operation has never been so easy. The new IC-W2A has completely independent volume, squelch, frequency displays and speaker jacks.

\*60 MEMORY CHANNELS

Each band is equipped with 30 memory channels and 1 call channel. These channels offer space to store the operating frequency, offset direction, offset frequency and subaudible tone frequency for simple repeater accessing.

\*BUILT-IN PAGER AND CODE SQUELCH FUNCTION

Enjoy selective calling and quiet, personalized communications without installing an optional unit. It's all built-in!

\*FIVE WATTS

The IC-W2A puts out a full five watts output by connecting a 13.5 volt DC power supply.

\*AUTO DIALING

With four DTMF code memory channels, swift access to an autopatch station or repeater control is possible.

The rugged, splash resistant IC-W2A has a multitude of additional features such as a 24 hour clock, a variety of scanning functions, and a full line of options to make your dual band operation simple and fun!

The IC-W2A will be available at the end of March, 1991. Suggested retail price is \$629.00. For a brochure on the new IC-W2A please call the Icom Brochure Request Hotline at 1-800-999-9877.

# # #

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73, Paul

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From the shack of Paul MacDonald! Packet Radio: WA10MM@KB4N.NH.USA  
/ / /\ / /~~/ /\ / /\ / /\ / ( ~ / / / / /\ / \ / / /  
\ / / /~~\ / / \_ / / / / / ~ / V /~~\ ) /~/ /\_ /~~\, / V /~/  
Internet: ...ubbs-nh!wa10mm!paul CIS: 70411,626 PLink: UPPERCRUST  
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Date: 31 Mar 91 09:20:18 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: PACKET SOLAR TERRESTRIAL FORECAST AND REVIEW (PART I)  
To: info-hams@ucsd.edu

\$STFR910331.1  
SOLAR TERRESTRIAL FORECAST (1/2) 31 MARCH 1991  
PACKET RADIO REPORT  
SOLAR TERRESTRIAL DISPATCH  
(PACKET: VE6BBM@VE6BBM.AB.CAN.NOAM)  
(INTERNET: OLER@HG.ULETH.CA)

VALID: 31 MAR - 13 APR

WARNINGS:

- POTENTIAL MAJOR SOLAR FLARE WARNING (ending 01 April).
- POTENTIAL PROTON FLARE WARNING (ending 01 April).

- POTENTIAL SATELLITE PROTON EVENT WARNING (ending 01 April).
- POTENTIAL PCA ACTIVITY WARNING (ending 01 April).

ALERTS : None in effect as of 31 Mar.

#### 14-DAY SOLAR/RADIO/MAGNETIC/AURORAL ACTIVITY OUTLOOK

	10cm	HF Propagation +/- CON								VHF	SID ENH.				AU.BKSR DX				Mag	Aurora			
	Flux	LO	MI	HI	PO	SWF	MUF	ERR	%	SIG	LO	MI	HI	LO	MI	HI	%	K Ap	LO	MI	HI		
--		-----									-----				-----					-----			
31	195 (M)	G	F	P	P	50	35	10	75	N	50	50	40	00	20	40	15	3 12	NV	LO	MO		
01	200 (M)	F	F	P	P	40	38	10	70	N	40	40	40	10	50	60	15	4 20	NV	LO	MO		
02	205 (M)	G	F	P	P	40	40	10	70	N	35	30	30	05	35	50	20	3 16	NV	LO	MO		
03	205 (M)	G	F	P	P	40	40	10	70	N	35	30	25	00	25	50	20	3 12	NV	NV	LO		
04	210 (M)	G	F	P	P	40	40	10	65	N	35	30	30	00	20	40	20	3 10	NV	NV	LO		
05	210 (M)	G	F	P	P	40	40	10	65	N	35	30	40	00	25	40	15	3 14	NV	LO	MO		
06	215 (M)	F	F	P	P	50	40	10	65	N	40	40	40	00	30	50	15	4 17	NV	LO	MO		
07	215 (M)	G	F	P	P	50	40	10	65	N	40	40	40	00	25	40	15	4 17	NV	LO	MO		
08	220 (M)	G	G	F	F	50	42	10	65	N	40	40	35	00	20	35	10	3 12	NV	NV	MO		
09	225 (M)	G	G	F	F	50	45	10	60	N	40	40	35	00	10	25	10	3 10	NV	NV	LO		
10	235 (M)	G	G	F	F	50	45	10	60	N	45	45	40	00	10	25	10	3 10	NV	NV	LO		
11	240 (M)	G	G	F	F	50	45	10	60	N	45	45	40	00	10	25	10	3 10	NV	NV	LO		
12	245 (M)	G	G	F	F	50	45	10	60	N	55	55	50	00	10	25	10	3 10	NV	NV	LO		
13	250 (M)	G	G	F	F	50	45	10	60	N	55	55	50	00	10	25	10	3 10	NV	NV	LO		

NOTE: For information regarding the above format, consult part 2 (2/2) of this report in a separate message.

★★ END OF PACKET REPORT (1/2) ★★

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 Date: 31 Mar 91 09:21:59 GMT  
 From: news-mail-gateway@ucsd.edu  
 Subject: PACKET SOLAR TERRESTRIAL FORECAST AND REVIEW (PART II)  
 To: info-hams@ucsd.edu

\$STFR910331.2  
 SOLAR TERRESTRIAL FORECAST (2/2) 31 MARCH 1991  
 PACKET RADIO REPORT  
 SOLAR TERRESTRIAL DISPATCH  
 (PACKET: VE6BBM@VE6BBM.AB.CAN.NOAM)  
 (INTERNET: OLER@HG.ULETH.CA)

FORMAT OF SOLAR TERRESTRIAL FORECAST FOR PACKET RADIO NETWORK:

Date (day only)  
10.7 cm Radio Solar Flux  
Solar Activity (VL=Very Low, L=Low, M=Moderate, H=High, VH=Very High)  
HF Propagation Conditions for LOw, MIddle, HIgh, and POlar areas (see below)  
HF Short Wave Fade Probability (in %)  
HF Maximum Usable Frequency (in MHz) (weighted for low and middle latitudes).  
HF Potential MUF ERRor (in +/- MHz)  
HF Prediction CONfidence Level (in %)  
VHF SIGnal Quality (see below)  
VHF Sudden Ionospheric ENHancement Probs (in %) for LOw, MIddle, HIgh Lats  
VHF AUroral BackScatter Probs (in %) for LOw, MIddle and HIgh Latitudes  
VHF Overall Global DX Potential (in %) - weighted for Low and Middle latitudes  
Geomagnetic Activity Kp Index (peak value - see below)  
GeoMAGnetic Activity Ap Index (peak value - see below)  
AURORAl Activity for LOw, MIddle and HIgh Latitudes (see below)

HF Prop. Quality rated as: EG=Extremely Good, VG=Very Good, G=Good, F=Fair,  
P=Poor, VP=Very Poor, EP=Extremely Poor.  
VHF Sig. Quality rated as: AN=Above Normal, N=Normal, BN=Below Normal,  
D=Disturbed (ex. associated with polar blackouts).  
Kp Planetary Index rated: 0=V.Quiet, 1=Quiet, 2=Unstld, 3=Active, 4=V.Active,  
5=Minor Storm, 6=Major Storm, 7=Maj-Sev Storm, 8=Severe Storm, 9=V.Severe.  
Ap Planetary Index rated: 0-7=Quiet, 8-16=Unstld, 17-29=Active,  
30-49=Minor Storm, 50-99=Major Storm, Severe Storm >=100.  
Auroral Activity rated: NV=Not Visible, L=Low, M=Moderate, H=High,  
VH=Very High.

\*\* END OF PACKET REPORT (2/2) \*\*

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Date: 31 Mar 91 09:13:02 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: SOLAR TERRESTRIAL FORECAST AND REVIEW - STORM EVENT SUMMARY  
To: info-hams@ucsd.edu

--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---  
March 31 to April 09, 1991

Report Based In-Part from Data Obtained from the  
Space Environment Services Center  
Boulder Colorado

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SOLAR TERRESTRIAL REVIEW FOR 24 MARCH TO 30 MARCH

Solar activity this week was moderate to high. Several X-class events were observed from Region 6555. This region proved to be exceptionally active. Most of the major flares which were spawned by this region reached X-class x-ray intensities (the most intense class rated) and large optical sizes (3B).

The most noteworthy event occurred outside of the review period, but will be covered here since it has not been covered previously. On 22 March, a powerful proton flare exploded from Region 6555 at a sensitive position of S26E28. The flare attained an exceptional class X9.4/3B rating and was associated with very significant radio emissions. The tenflare from this event was rated at 36,000 s.f.u., while the 245 MHz emission was rated at 260,000 s.f.u. (the most intense emission seen in quite some time). The flare produce moderate intensity Type II and IV sweeps. At 08:20 UT on 23 March, protons began arriving from this major flare. The ensuing proton event was moderately large (not abnormally large) and produced a long-duration PCA (polar cap absorption) event which ended on 29 March.

A major geomagnetic storm warning was issued shortly thereafter. The storm began with a very powerful SSC (sudden storm commencement) shock at 03:42 UT on 24 March. The interplanetary shockwave produced by this flare was the most intensive shock observed so far this solar cycle. Magnetometers throughout the world immediately sprang into action, exhibiting the most intense geomagnetic storm activity since the major storm of March 13-14, 1989. Periods of severe storming were observed world-wide. Intense fluctuations of more than 1,500 to 2,000 gammas were observed over many areas. The storm produced the largest planetary magnetic A-indices since the March storm event of 1989. A planetary A-index of 115 (prelim) was observed at 00:00 UT on 24 March (severe storm conditions). On 25 March, the planetary A-index fell to 92 (high-intensity major storm conditions). On 26 March, the A-index dropped a bit more to 83 (still strong major storming), followed by a drop to 32 (low-intensity minor storming) on 27 March.

This storm produced the most extensive and intensive auroral activity since the large auroral storm of March 1989. Areas as far south as Alabama, Kansas, Oklahoma, Mississippi and Georgia witnessed auroral activity. The activity was associated with brilliant red rays, extensive and very active curtain aurora, rapid pulsations and color changes. Southern hemisphere observers in Australia also witnessed auroral activity much further north than usual. The activity remained extensively visible on 24 and 25 March for low latitude observers. The activity then receded to the middle and northern latitudes on 26 and 27 March.

HF propagation was severely degraded on 24 through 26 March. Blackout conditions were observed over extensive areas in both the northern and southern hemispheres. Normally strong signals were either severely absorbed or completely absorbed. High latitudes were affected most severely. The PCA

event combined with the intense auroral and geomagnetic activity produced intense radio signal absorption which lasted for many days. Complete radio blackouts occurred over most high latitude and polar regions from 24 March to 27 March. Some slight improvements were noticed on 28 March with more noticable improvements since then. Conditions are still below normal at the present time, but have improved significantly.

VHF propagation conditions experienced some of the most unusual activity since the March 1989 storm. Most noteworthy were the extensive auroral backscatter communications which occurred. The lower latitudes experienced the best opportunities for auroral backscatter on 24 and 25 March. Frequencies above 400 MHz were used successfully in auroral communications.

Storming subsided on 27 March to generally active conditions. Since then, activity has remained mostly unsettled.

#### SHORT TERM SOLAR TERRESTRIAL FORECAST

Region 6555 is now passing beyond the west limb (on 31 March) in a significantly simpler and less threatening configuration, although magnetic aspects of this region remained capable of producing M-class flare activity. This region is expected to continue to decay on the far side of the sun and should return as a simpler, less complex area and of smaller size (if it returns at all).

Solar activity will likely remain low to moderate over the coming week, barring the emergence of any unexpected complex active regions. Occasional M-class flaring will be observed over the coming week, probably intermixed with periods of low C-class flare activity. No major flares are expected. Solar activity should become more dormant over the coming week.

Geomagnetic activity is expected to remain generally unsettled over the coming week. The only possible exceptions to this are 01 April, when an increase to active levels is expected due to the last major class X2 flare, and near 5-7 April when a well placed coronal hole should increase activity levels to active conditions. No storm conditions are predicted for the coming week, except possibly at high latitudes on 01 April and 5-7 April.

HF propagation conditions should return to normal this week, with a chance for above normal conditions towards the latter part of the week. MUF's should return to values between 35 and 45 MHz by the end of the week over the middle and low latitudes. Higher latitudes are expected to experience continuing below-normal propagation conditions. Ionization levels are still a bit higher than normal over these regions, which may affect long-distance communications more than usual.

VHF propagation conditions will remain normal over all latitudes over

the coming week. No significant auroral backscatter communications are expected. Conditions should be relatively stable. The probability for SID-induced enhancements are low this week, but may still be possible over the low and middle latitudes for brief periods due to minor M-class flaring.

#### SUMMARY OF ALL ACTIVE REGIONS VISIBLE ON THE SOLAR DISK AS OF 31 MARCH

Region #	Location	L0	Area	Class	LL	Spots	Magnetic Type
-----	-----	---	----	-----	--	-----	-----
6555	S23W82	182	3300	EKI	15	029	BETA GAMMA DELTA
6556	S11W83	183	0360	DAO	09	008	BETA
6558	S15W43	143	0120	DSO	09	005	BETA
6559	N17W72	172	0450	DSO	10	005	BETA
6560	S11W64	164	0030	AXX	02	003	ALPHA
6561	S08W80	180	0480	DAI	08	005	BETA
6562	N14E42	058	1170	DAC	09	034	BETA GAMMA
6563	S10E45	055	1230	DKI	09	021	BETA
6564	N21E08	092	0030	BX0	03	003	BETA
6565	N09E71	029	0150	DSO	09	004	BETA

NOTES: Area is in million square kilometers. Angular extent (LL) and solar longitude (L0) are in degree's. For more information regarding the terminology used above, request the Glossary of Solar Terrestrial Terms from: "oler@hg.uleth.ca".

#### H-ALPHA PLAGES WITHOUT SPOTS. LOCATIONS VALID AS OF 00:00 UT ON 31 MARCH

REGION	LOCATION	L0	COMMENTS (IF ANY)
-----	-----	---	-----
6557	S21W57	157	NONE

#### ACTIVE REGIONS DUE TO RETURN BETWEEN 31 MARCH AND 02 APRIL

Region	Latitude	Longitude (Helio.)
-----	-----	-----
6536	N17	004
6537	S08	003
6538	S23	343
6542	S11	336

NOTES: For definitions regarding the above, request the "Glossary of Solar Terrestrial Terms" from "oler@hg.uleth.ca".

#### GRAPHICAL ANALYSIS OF RECENT PLANETARY (GLOBAL) GEOMAGNETIC ACTIVITY



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 DATA NOT AVAILABLE AT THIS TIME  
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NOTES:

The data above represents planetary geomagnetic activity. Data from many magnetic observatories around the world are used in constructing the above chart. The first graph line for each day represents geomagnetic activity which occurred between 00 UT and 03 UT. The second graph line represents activity which occurred between 03 UT and 06 UT, etc. For information regarding the interpretation and/or use of these charts, send a request for the document "Understanding Solar Terrestrial Reports" to: oler@hg.uleth.ca.

PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (31 MARCH - 09 APRIL)

EXTREMELY SEVERE												VERY HIGH!
VERY SEVERE STORM												HIGH
SEVERE STORM												MODERATE
MAJOR STORM												LOW - MOD.
MINOR STORM												LOW
VERY ACTIVE		*										NONE
ACTIVE		***	**			**	***	***				NONE
UNSETTLED	***	***	***	***	* *	***	***	***	***	* *		NONE
QUIET	***	***	***	***	***	***	***	***	***	***		NONE
VERY QUIET	***	***	***	***	***	***	***	***	***	***		NONE
-----												
Geomagnetic Field	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue		Anomaly
Conditions	Given in 8-hour intervals											Intensity

CONFIDENCE LEVEL: 75%

NOTES:

Predicted geomagnetic activity is based heavily on recurrent phenomena. Transient energetic solar events cannot be predicted reliably over periods in excess of several days. Hence, there may be some deviations from the predictions due to the unpredictable transient solar component.

GRAPHICAL ANALYSIS OF SOLAR ACTIVITY OVER THE PAST 60 DAYS

-----  
 DATA NOT AVAILABLE AT THIS TIME  
 -----



PROPAGATION	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue
QUALITY	Given in 8-Hour UT Intervals									

## Middle Latitude Paths

CONFIDENCE LEVEL ----- 70%	EXTREMELY GOOD											
	VERY GOOD											
	GOOD									*	*	*
	FAIR	***	* *	***	***	***	***	***	**		*	
	POOR		*									
	VERY POOR											
	EXTREMELY POOR											
	-----											
	PROPAGATION QUALITY	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	
		Given in 8-Hour UT Intervals										

## Low Latitude Paths

		EXTREMELY GOOD													
		VERY GOOD													
CONFIDENCE LEVEL		GOOD	***	* *	* *	***	***	***	*	*	*	*	***	***	
		FAIR		*	*					*	*				
	-----	POOR													
	70%	VERY POOR													
		EXTREMELY POOR													
-----															
PROPAGATION QUALITY			Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue			
			Given in 8-Hour UT Intervals												

NOTES:

POTENTIAL VHF DX PROPAGATION PREDICTIONS (31 MARCH - 09 APRIL)  
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

## HIGH LATITUDES

[illegible]



	NORMAL	***	***	***	***	***	***	***	***	***	***	40%	*	*				*	*	*	*		
	BELOW NORM											60%											
	VERY POOR											80%											
	BLACKOUT											100%											
	=====	===	===	===	===	===	===	===	===	===	===		-----										
	100%											100%											
	80%											80%											
	60%											60%											
	40%								*	*	*	*	40%										
	20%	*	***	*	*	*	*	**	**	**	**	20%	*										
	0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*		
	-----+	----	----	----	----	----	----	----	----	----	----		-	-	-	-	-	-	-	-	-		
	CHANCE OF	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue		S	M	T	W	T	F	S	S	M	T	
	VHF DX	Given in 8 hour local time intervals												AURORAL BACKSCATTER									

AURORAL ACTIVITY PREDICTIONS (31 MARCH - 09 APRIL)

CONFIDENCE LEVEL ----- 75%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE		***	*			*	***	***	*		
	LOW	***	***	***	***	***	***	***	***	***	***	***
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	---	---	---	---	---	---	---	---	---	---	---
	AURORAL INTENSITY	Sun Eve.	Mon Twilight	Tue /Midnight	Wed /Morn.	Thu Twilight	Fri /Midnight	Sat /Morn.	Sun Twilight	Mon /Midnight	Tue /Morn.	

[illegible]

-----	---	---	---	---	---	---	---	---	---	---	---
AURORAL	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	
INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										
-----											

#### Low Latitude Locations

CONFIDENCE LEVEL ----- 85%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE											
	LOW											
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	---	---	---	---	---	---	---	---	---	---	---
	AURORAL	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										
	-----											

#### NOTE:

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: oler@hg.uleth.ca.

\*\* End of Report \*\*

Date: 31 Mar 91 13:36:18 GMT  
 From: usc!zaphod.mps.ohio-state.edu!pacific.mps.ohio-state.edu!linac!midway!  
 quads.uchicago.edu!toto@ucsd.edu  
 Subject: Two Questions  
 To: info-hams@ucsd.edu

I am posting this for a new ham who does not have net access. He worked the contest this weekend and wondered.

1) Are there countries whose call signs are not listed in the international call book? For example, TW1C, CK7C. If so, how do you find them for a QSL?

2) Does anyone have the QSL route for P40V?

Jessica

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=====O=====

Sandra Jessica Smyth .. -. . . -.. . . -..- - - - .-.. . . -.. .  
 toto@midway.uchicago.edu Believer in lost causes

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End of Info-Hams Digest

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